

410.018

M. Arand et al

Serial No.: 10/009,030

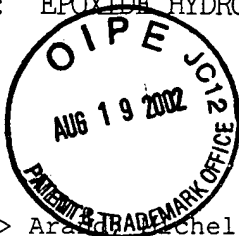
Filed: November 2, 2000

For: EPOXYDE HYDROLASES OF ASPERGILLUS ORIGIN

PTO/PST Rec'd

19 AUG 2002

HS



SEQUENCE LISTING

<110> Archel Michel

Archelas, Alain Robert

Baratti, Jacques

Furstoss, Roland

<120> PROTEINS WITH FUNGICIDAL ORIGIN AND DERIVATIVES, THEIR
PROCESS OF OBTENTION, AND THEIR USES, NAMELY FOR THE
PREPARATION OF ENANTIOMERICALLY PURE MOLECULES

<130> 410.018

<140> 10/009,030

<141> 2001-01-11

<160> 2

<170> PatentIn Ver. 2.1

<210> 1

<211> 1197

<212> DNA

<213> Aspergillus niger

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<221> CDS

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Nucleotic Sequence SEQ ID NO : 1

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aat cct ttc acg gtc tct atc ccg gat gaa cag ttg gat gac ttg aaa 96
Asn Pro Phe Thr Val Ser Ile Pro Asp Glu Gin Leu Asp Asp Leu Lys
      20          25          30

acc ctc gtc cga ctg tcc aag att gct cct ccc acc tat gag agc ctg 144
Thr Leu Val Arg Leu Ser Lys Ile Ala Pro Pro Thr Tyr Glu Ser Leu
      35          40          45

caa gcg gat ggc cgg ttt ggc atc act tct gaa tgg ctg aca act atg 192
Gln Ala Asp Gly Arg Phe Gly Ile Thr Ser Glu Trp Leu Thr Thr Met
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cgg gag aaa tgg ctc tcg gag ttt gac tgg cga cca ttt gaa gct cga 240
Arg Glu Lys Trp Leu Ser Glu Phe Asp Trp Arg Pro Phe Glu Ala Arg
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cac ttt gct gct ctc ttc tcc gag agg gag gat gct gtg cct atc gca	336
His Phe Ala Ala Leu Phe Ser Glu Arg Glu Asp Ala Val Pro Ile Ala	
100 105 110	
ttg ctc cat ggt tgg ccc ggc agc ttc gtt gag ttc tac cca atc ctg	384
Leu Leu His Gly Trp Pro Gly Ser Phe Val Glu Phe Tyr Pro Ile Leu	
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Gln Leu Phe Arg Glu Glu Tyr Thr Pro Glu Thr Leu Pro Phe His Leu	
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Val Val Pro Ser Leu Pro Gly Tyr Thr Phe Ser Ser Gly Pro Pro Leu	
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165 170 175	
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Met Lys Asp Leu Gly Phe Gly Ser Gly Tyr Ile Ile Gln Gly Gly Asp	
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Pro Ser Ile Glu Ser Leu Ser Ala Ala Glu Lys Glu Gly Ile Ala Arg	
225 230 235 240	
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Met Glu Lys Phe Met Thr Asp Gly Leu Ala Tyr Ala Met Glu His Ser	
245 250 255	
act cgg ccc agt act att ggc cac gtg ctg tcc agc agt ccg atc gca	816
Thr Arg Pro Ser Thr Ile Gly His Val Leu Ser Ser Ser Pro Ile Ala	
260 265 270	
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Leu Leu Ala Trp Ile Gly Glu Lys Tyr Leu Gln Trp Val Asp Lys Pro	
275 280 285	
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gaa agt ttc ccg cgg gca att cat acc tac cgc gag act acc cca act 960
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 cac aag ccg ttt ggg ttc tcc ttc ttc ccc aag gac ctt tgt cct gtg 1056
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 340 345 350

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 cat gca gag gga gga cac ttt gcc gca ttg gag cgt cca cgc gag ctg 1152
 His Ala Glu Gly Gly His Phe Ala Ala Leu Glu Arg Pro Arg Glu Leu
 370 375 380

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Peptide Sequence SEQ ID NO : 2

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<213> Aspergillus niger

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 35 40 45

 Gln Ala Asp Gly Arg Phe Gly Ile Thr Ser Glu Trp Leu Thr Thr Met
 50 55 60

 Arg Glu Lys Trp Leu Ser Glu Phe Asp Trp Arg Pro Phe Glu Ala Arg
 65 70 75 80

 Leu Asn Ser Phe Pro Gln Phe Thr Thr Glu Ile Glu Gly Leu Thr Ile
 85 90 95

 His Phe Ala Ala Leu Phe Ser Glu Arg Glu Asp Ala Val Pro Ile Ala
 100 105 110

 Leu Leu His Gly Trp Pro Gly Ser Phe Val Glu Phe Tyr Pro Ile Leu
 115 120 125

Gin Leu Phe Arg Glu Glu Tyr Thr Pro Glu Thr Leu Pro Phe His Leu
 130 135 140

Val Val Pro Ser Leu Pro Gly Tyr Thr Phe Ser Ser Gly Pro Pro Leu
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Asp Lys Asp Phe Gly Leu Met Asp Asn Ala Arg Val Val Asp Gin Leu
 165 170 175

Met Lys Asp Leu Gly Phe Gly Ser Gly Tyr Ile Ile Gin Gly Gly Asp
 180 185 190

Ile Gly Ser Phe Val Gly Arg Leu Leu Gly Val Gly Phe Asp Ala Cys
 195 200 205

Lys Ala Val His Leu Asn Leu Cys Ala Met Arg Ala Pro Pro Glu Gly
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Pro Ser Ile Glu Ser Leu Ser Ala Ala Glu Lys Glu Gly Ile Ala Arg
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Met Glu Lys Phe Met Thr Asp Gly Leu Ala Tyr Ala Met Glu His Ser
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Thr Arg Pro Ser Thr Ile Gly His Val Leu Ser Ser Ser Pro Ile Ala
 260 265 270

Leu Leu Ala Trp Ile Gly Glu Lys Tyr Leu Gln Trp Val Asp Lys Pro
 275 280 285

Leu Pro Ser Glu Thr Ile Leu Glu Met Val Ser Leu Tyr Trp Leu Thr
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Glu Ser Phe Pro Arg Ala Ile His Thr Tyr Arg Glu Thr Thr Pro Thr
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Ala Ser Ala Pro Asn Gly Ala Thr Met Leu Gln Lys Glu Leu Tyr Ile
 325 330 335

His Lys Pro Phe Gly Phe Ser Phe Phe Pro Lys Asp Leu Cys Pro Val
 340 345 350

Pro Arg Ser Trp Ile Ala Thr Thr Gly Asn Leu Val Phe Phe Arg Asp
 355 360 365

His Ala Glu Gly Gly His Phe Ala Ala Leu Glu Arg Pro Arg Glu Leu
 370 375 380

Lys Thr Asp Leu Thr Ala Phe Val Glu Gln Val Trp Gln Lys
 385 390 395